

HLB120-240 Series 13KW to 78KW Dual Voltage DC/AC Load Banks

Features

- Manual constant current control
- Lead Acid or Ni-cad battery testing
- Battery charger / rectifier testing plus single phase
- AC testing of UPS and generators
- Simple operation via panel switches
- Dual voltage feature
- Test sockets for voltage and current readings
- Adjustable load current
- High voltage operation up to 260V
- Safety isolation contactors
- Fan fail protection
- High power
- Portable



The Hillstone HLB120-240 series load banks are designed to perform a manually controlled constant current discharge on lead acid or ni-cad batteries up to 260 volts. Fine control is provided from approximately 1A to max current via panel mounted switches. The unit has force cooled high power resistor elements and several safety features including fan fail auto shut-down, emergency stop push button and battery isolation of each load circuit via continuously rated DC contactors. All designs incorporate the Hillstone dual voltage feature which allows double the available load current at half voltage.

HLB120-240 Performance Table:

Load Bank Type	Max Watts	Range 1 Amps At 120V	Range 2 Amps At 240V	Range 1 Minimum Ohms	Range 2 Minimum Ohms
HLB120-240-13	13KW	100A	50A	1.30 Ω	5.2 Ω
HLB120-240-20	20KW	150A	75A	0.87 Ω	3.4 Ω
HLB120-240-26	26KW	200A	100A	0.65 Ω	2.6 Ω
HLB120-240-32	32KW	250A	125A	0.52 Ω	2.1 Ω
HLB120-240-40	40KW	300A	150A	0.43 Ω	1.7 Ω
HLB120-240-45	45KW	350A	175A	0.37 Ω	1.5 Ω
HLB120-240-52	52KW	400A	200A	0.33 Ω	1.3 Ω
HLB120-24-58	58KW	450A	225A	0.29 Ω	1.2 Ω
HLB120-240-65	65KW	500A	250A	0.26 Ω	1.0 Ω
HLB120-240-72	72KW	550A	275A	0.24 Ω	0.95 Ω
HLB120-240-78	78KW	600A	300A	0.22 Ω	0.90 Ω



HLB120-240 Specification:

Type Ref	HLB120-240 Series	
Nominal Voltage	Range 1 : 120V	Range 2 : 240V
Maximum Voltage	Range 1 : 130V	Range 2 : 260V
Test Voltage	DC or single phase 50-60 hz	
Maximum Available Current	Refer to rating table and easy calculator	
Rating	Continuous rating at full load, max voltage	
Maximum Number Of Lead Acid Cells	Range 1 : 60 Cells	Range 2 : 120 Cells
Maximum Number Of Ni-cad Cells	Range 1 : 92 Cells	Range 2 : 184 Cells
Test Sockets	4 mm shrouded test sockets are provided to allow the test engineer to measure amps and volts using his multimeter.	
Auxiliary Mains Supply	230/240V Single phase 50/60 Hz (110V optional)	
Mains Cable Set	2 metre mains cable set with IEC & UK 13A plugs	
DC Cable Set	Refer to optional extras	
Construction	Aluminium with swivel castors and carrying handles	
Finish	Light grey RAL7032 textured finish	
Cooling	Force air cooling, horizontal fans	
Environmental Protection Rating	IP21	
Movement	Top Handles, swivel castors and suitable for folk lift	
Operating Temperature	0 – 40 deg C	
Storage Temperature	0 – 80 deg C	

HLB120-240 Case Sizes:

Load Bank Type	Case Size	Length (mm)	Width (mm)	Height 9mm)	Approx. Weight (Kgs)
HLB120-240-13	A	805mm	350mm	560mm	37Kgs
HLB120-240-20	A	805mm	350mm	560mm	39Kgs
HLB120-240-26	B	1050mm	590mm	950mm	107Kgs
HLB120-240-32	B	1050mm	590mm	950mm	109Kgs
HLB120-240-40	B	1050mm	590mm	950mm	110Kgs
HLB120-240-45	C	1010mm	575mm	1125mm	120Kgs
HLB120-240-52	C	1010mm	575mm	1125mm	132Kgs
HLB120-24-58	C	1010mm	575mm	1125mm	140Kgs
HLB120-240-65	C	1010mm	575mm	1125mm	145Kgs
HLB120-240-72	C	1010mm	575mm	1125mm	150Kgs
HLB120-240-78	C	1010mm	575mm	1125mm	155Kgs

Optional extras

- 1) DC cable sets: 3, 5 or 10 metre lengths
- 2) 110V auxiliary mains input
- 3) Elapse discharge time indicator

Easy load bank selector and max load calculator for different test voltages

STEP 1

- Determine the max test voltage
- Use Range 1 for max test voltages below 130V
- Use Range 2 for max test voltages below 260V

STEP 2

- Calculate required minimum ohms = Min volts / test Amps
- Example: 99 volts / 155 amps = 0.64 ohms

STEP 3

- Select minimum ohms from the appropriate Range on the rating table
- Note: always select a lower ohmic value that the result in step 2
- Example: HLB120-240-32 = 0.52 ohms on Range 1 and will provide 190A at 99V

Notes

- Units are designed for indoor use in a clean, dry and well ventilated environment.
- The available current and ratings are proportional to the end of test voltage.
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Typical Case Size D Unit Illustrated



Typical Case Size E Unit Illustrated